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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/751,023 12/29/2000 G. Ian Rowlandson 31-CD-5530 7713 44702 7590 03/08/2006 **EXAMINER** OSTRAGER CHONG FLAHERTY & BROITMAN PC GOTTSCHALK, MARTIN A 250 PARK AVENUE, SUITE 825 ART UNIT PAPER NUMBER NEW YORK, NY 10177 3626

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		09/751,023	ROWLANDSON, G. IAN	
		Examiner	Art Unit	
		Martin A. Gottschalk	3626	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)⊠	Responsive to communication(s) filed on <u>05 De</u>	ecember 2005.		
2a)⊠	This action is <b>FINAL</b> . 2b) This	action is non-final.		
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4)⊠ Claim(s) <u>1-11 and 16-27</u> is/are pending in the application.				
4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>1-11 and 16-27</u> is/are rejected.				
·	7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.				
Application Papers				
9) The specification is objected to by the Examiner.				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>				
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)				
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  Paper No(s)/Mail Date  Paper No(s)/Mail Date  Other:				

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#### **DETAILED ACTION**

1. Claims 1-11 and 16-27 have been examined. Claims 1 and 16 have been amended. Claims 12-15 have been cancelled.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1, 4, 5, 7, 11, 16, 19-21, 23, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Bayne (PG Pub# US 2005/0060198, hereinafter Bayne).
- A. As per claim1, Bayne discloses a method for scheduling an emergency procedure, comprising the steps of:

acquiring (Bayne: [0086]; [0089], reads on "...retrieves medical records...") an electrocardiogram (Bayne: [0037], In 4-7) record for a particular patient;

sending said electrocardiogram record to a computer (Bayne: [0094], note the automated acquisition of instrument data by the "clinician device" and note that the instrument could be an electrocardiograph as referenced in the previous step. This acquisition step, as well as the subsequent remote analysis step disclosed in the passage are examples of sending an electrocardiogram record to a computer);

said computer determining that said particular patient has a high probability of acute coronary syndrome based at least partly on an automated analysis of data in said electrocardiogram record (Bayne: [0073], and Fig 4. Note in particular the example of a cardiologist as clinician, suggesting the use of electrocardiogram record data. Further note the use of an expert system software module for performing diagnosis. The Examiner considers an expert system operating on electrocardiogram data to be a form of automated analysis that determines whether or not a patient has a high probability of acute coronary syndrome. See also Bayne: Fig 5 and [0082] which discloses an expert system making a medical assessment by analyzing data generated and relayed from a remote patient, [0078]. Note that the entire process - from data acquisition, to notifying the call center, to analyzing the data, to making the assessment - is all done without human intervention.);

said computer automatically routing a communication (Bayne: Fig. 1, item 114 the "triage processing block"; [0032], Ins 1-10; [0078], in particular Ins 9-11, wherein the claim reads on "...an emergency request automatically generated in response to a condition...") to an electronic device accessible to a cardiologist on call (Bayne: [0073], Ins 11-12), in response to said determination that said particular patient has a high probability of acute coronary syndrome, said communication comprising said electrocardiogram record and results of said automated analysis (Bayne: [0089], Ins 1-5, reads on "...retrieving the patient's most updated medical records." Further note Bayne: [0083], where in response to the previous step of determining a particular medical condition which could be acute coronary syndrome, the system decides what type of clinician would be most appropriate and routes a communication to an on-call clinician by way of the "clinician device", [0086]. Note further that sufficient information needed to make the house call is transmitted, which would include the recent electrocardiogram data generated from the remote patient device which was used to initiate the alert process.);

in response to a predetermined message from the cardiologist indicating that said patient should undergo an emergency procedure for treatment of acute coronary syndrome, said computer automatically scheduling said emergency procedure at an emergency coronary treatment facility (Bayne: [0098]. The Examiner considers the clinician utilizing "...the clinician device to complete an

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on-line admission process..." to be a form of both the clinician providing a predetermined message, and of the clinician device - i.e. a computer - scheduling the procedure. Note in the same passage the distinction made between "manually" scheduling appointments and using the clinician device to do so. It is further noted that the conditional statement "...if the patient's condition warrants..." includes needing an emergency procedure. The Examiner further considers a "...local hospital..." to be a form of an emergency coronary treatment facility. Note further in the same passage the disclosure of the clinician device automatically notifying the remotely located call center computer's "prescheduled appointment information block with followup information", such as to make an appointment. See further Bayne: [0080], Ins 10-14 which discloses the ability of the call center's computer to automatically make an appointment with an emergency coronary treatment facility. The exemplary facility provided in the passage is an ambulance, but might include other types of facilities.).

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- B. As per claims 4, 5, 7, and 11, besides the amendments provided by claim 1 from which they depend, they are otherwise unamended, and as such, are rejected for the same reasons provided in the first Office Action.
- C. As per claims 16, it is a system claim which repeats the same limitations of claim 1, the corresponding method claim, as a collection of elements as opposed to a series of process steps. Since the teachings of Bayne disclose the underlying process steps

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that constitute the method of claim 1, it is respectfully submitted that they provide the underlying structural elements that perform the steps as well. As such, the limitations of claims 16 is rejected for the same reasons given above for claim 1.

D. As per claims 19-21, 23, and 24, besides the amendments provided by claim 16 from which they depend, they are otherwise unamended, and as such, are rejected for the same reasons provided in the first Office Action.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 5. Claims 2, 3, 6, 8-10, 17, 18, 22, and 25-27 are rejected under 35

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U.S.C. 103(a) as being unpatentable over Bayne as applied to claim 1 above, and further in view of the admitted prior art in the current application (PG Pub# 2002/0087355; hereinafter "the admitted prior art" or APA).

Note: In the following paragraphs, although claims 2, 3 and 6 are unamended, they are presented here as they were in the first Office Action for convenience.

A. As per claims 2 and 3 Bayne fails to disclose a method wherein

(Claim 2) said emergency coronary treatment facility is a catheterization lab; and

(Claim 3) said emergency procedure is percutaneous transluminal coronary angioplasty.

However, this feature is well known in the art as evidenced by the teachings of the admitted prior art.

In particular, the admitted prior art discloses that a catheterization lab is an emergency coronary treatment facility for performing procedures such as the percutaneous transluminal coronary angioplasty, or PTCA (APA: [0017]).

It would have been obvious to one skilled in the art at the time of the invention to modify the automated scheduling features taught by Bayne by incorporating the

teachings of the admitted prior art. The motivation of this combination would have been to improve the ability of patients to quickly obtain medical care for acute conditions (Bayne: [0008]).

B. As per claim 6, Bayne discloses a method wherein said automatic scheduling step comprises the steps of

accessing a respective schedule for each of a plurality of emergency coronary treatment facilities (Bayne: Fig. 1, item 116 - "pre-scheduled appointment block"; [0034]. The Examiner considers that this block could be programmed to access the schedules of the treatment facilities. See also Fig. 1, item 136 – "local hospital admissions"; [0040]. Note that communication with local hospital admissions resources would provide access to schedules for the treatment facilities within the hospitals.), and

selecting an emergency coronary treatment facility (Bayne: [0050]. Note that "...coordinating levels of service," is stated as a purpose of the local hospital admissions link. The Examiner considers an emergency coronary treatment to be an example of a level of service in need of coordination.)

Bayne fails to disclose

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an emergency coronary treatment facility having an optimum time-to-treatment.

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However, this feature is well known as evidenced by the teachings of the admitted prior art.

The admitted prior art teaches the importance of minimizing time-to-treatment in lowering the mortality rate of the PTCA procedure (APA: [0017], Ins 8-23).

The motivation to combine the teachings of Bayne and the admitted prior art is the same as provided above for claim 6 and are incorporated herein.

- C. As per claims 8-10, besides the amendments provided by claim 1 from which they depend, they are otherwise unamended, and as such, are rejected for the same reasons provided in the first Office Action.
- D. As per claims 17, 18, 22, and 25-27, besides the amendments provided by claim 16 from which they depend, they are otherwise unamended, and as such, are rejected for the same reasons provided in the first Office Action.

Response to Arguments

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6. Applicant's arguments in the response filed 12/05/2005 have been fully considered but they are not persuasive. They will be addressed below in the order in which they appear in the REMARKS section of the response.

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A. On pages 8 and 9 of the response, regarding amended claims 1 and 16,

Applicant argues that the Bayne reference does not teach certain features of Applicant's invention.

For example, on page 8, third paragraph, applicant states that, "Bayne does not teach scheduling a particular emergency medical procedure at a particular treatment facility at a particular time." In response, the Examiner respectfully points out that Applicant does not claim scheduling at a particular time, but rather in claim 1 (and 16) recites "scheduling said (an) emergency procedure at an (said) emergency coronary treatment facility." The only possible indication of scheduling a particular time would be in the word "emergency", which the Examiner considers to mean as soon as possible. With respect to scheduling a particular emergency medical procedure at a particular facility (i.e. an emergency coronary treatment facility), the Examiner respectfully disagrees with the assertion that the reference does not teach these features, and refers Applicant to the reasons provided for the rejection of claim 1, the third and last steps in particular.

Applicant further asserts in paragraph 4 starting on page 8, that the reference does not disclose that a patient may transmit an electrocardiogram during a phone call into the call center. In response, the Examiner again wishes to point out that Applicant does not claim this feature, thus the relevance of this argument is not apparent.

In this same paragraph, on page 9, appears to argue that Bayne does not disclose diagnosis of an acute cardiac condition with a subsequent response (such as scheduling a procedure). The Examiner respectfully disagrees and refers Applicant to the reasons provided for rejection of claim 1, the third and last steps in particular.

In the second paragraph on page 9, applicant appears to argue that Bayne does not disclose a computer programmed to perform certain recited steps. In response, the Examiner respectfully disagrees, and refers Applicant to the reasons provided for rejection of claim 1, noting in particular the references to the disclosure by Bayne of the use of an expert system for diagnosis, the communications between the call center computer and the clinician device, the triage module, and the pre-scheduled appointment information block.

B. On page 10, regarding claims 2 and 3, Applicant appears to argue that a prima facie case of obviousness to combine the teachings of Bayne with those of the admitted prior art has not been made.

In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Applicant asserts that it would not be obvious to modify the automated scheduling features taught by Bayne by incorporating into it the scheduling of a PTCA procedure at an emergency coronary treatment facility. The Examiner refers Applicant to the reasons and motivation to combine references provided for the rejection of claims 2 and 3 in the first Office Action. In particular, note, as per the reasons provided for the rejection of claim 1 above and from which these claims depend, that Bayne teaches scheduling an emergency coronary procedure. Applicant will further recognize from the admitted prior art that PTCA is well known in the art as an important type of such a procedure. Therefore it is reasonable (and thus obvious to one of ordinary skill in the art) to modify the teachings of Bayne to include scheduling PTCA, which clearly could only be performed at a facility with the capability to perform the procedure.

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C. In the last paragraph on page 6, regarding the reasons provided for the rejection of claim 6 in the first Office Action, Applicant appears to object to the use of the word "could" in the phrase "...could be programmed...", and asserts that the "mere possibility of doing something does not establish a prima-facie case for obviousness." The Examiner respectfully disagrees and wishes to clarify that the word "could" is not meant to convey uncertainty, nor unlimited, non-specific possibility, but rather is indicative of a logical inference flowing from the suggestion provided by the reference of a "prescheduled appointment block." In other words, one of ordinary skill in the art concerning emergency coronary care might logically pose the hypothetical question, "For what is this block <i.e. computer and program> making an appointment?" Given the context of an emergency medical situation and the disclosed system designed to deal with such a situation, it would be logical for such an artisan to modify the system by programming it to schedule an appointment for a necessary emergency procedure at a facility capable of performing the procedure. Note further the suggestion that in order to implement such a program, access to relevant facility information would need to be obtained.

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D. Also in this paragraph, in the reasons provided for claim 6 in the first Office Action, Applicant disagrees with the Examiner's observation that "communication with local hospital admissions resources would provide access to schedules for the treatment facilities within the hospitals." In response, the Examiner maintains the apparent validity of this statement, and further notes that perhaps the best source of information for finding out the availability of a hospital's treatment facilities would be

none other than the information available from the admissions department of the hospital itself. Note further the disclosure provided by Bayne: Fig 1, [0044] and [0050] of the communication connection between the call center, clinician device, and local hospital admissions.

E. Also in this paragraph, Applicant states that "the 'treatment facilities' recited in claim 6 would obviously not be accessible from the admissions office of a single hospital." In response, the Examiner respectfully disagrees and recalls the reference to Bayne provided in paragraph D above, and notes that there is nothing in the teaching of Bayne that limits access to communication with a single hospital, and logically, such a system would be in communication with a plurality of hospitals to cover the possibility of admissions to any and each of them.

#### Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

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than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Martin A. Gottschalk whose telephone number is (571)

272-7030. The examiner can normally be reached on Mon - Fri 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Thomas can be reached on (571) 272-6776. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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MG

02/22/2006